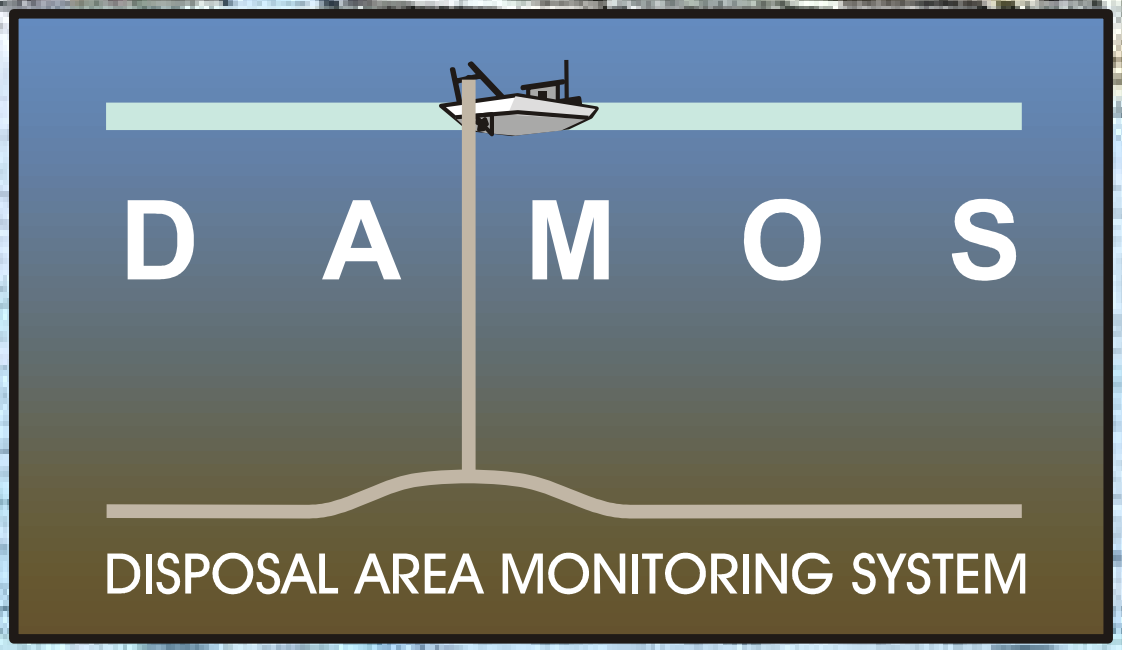
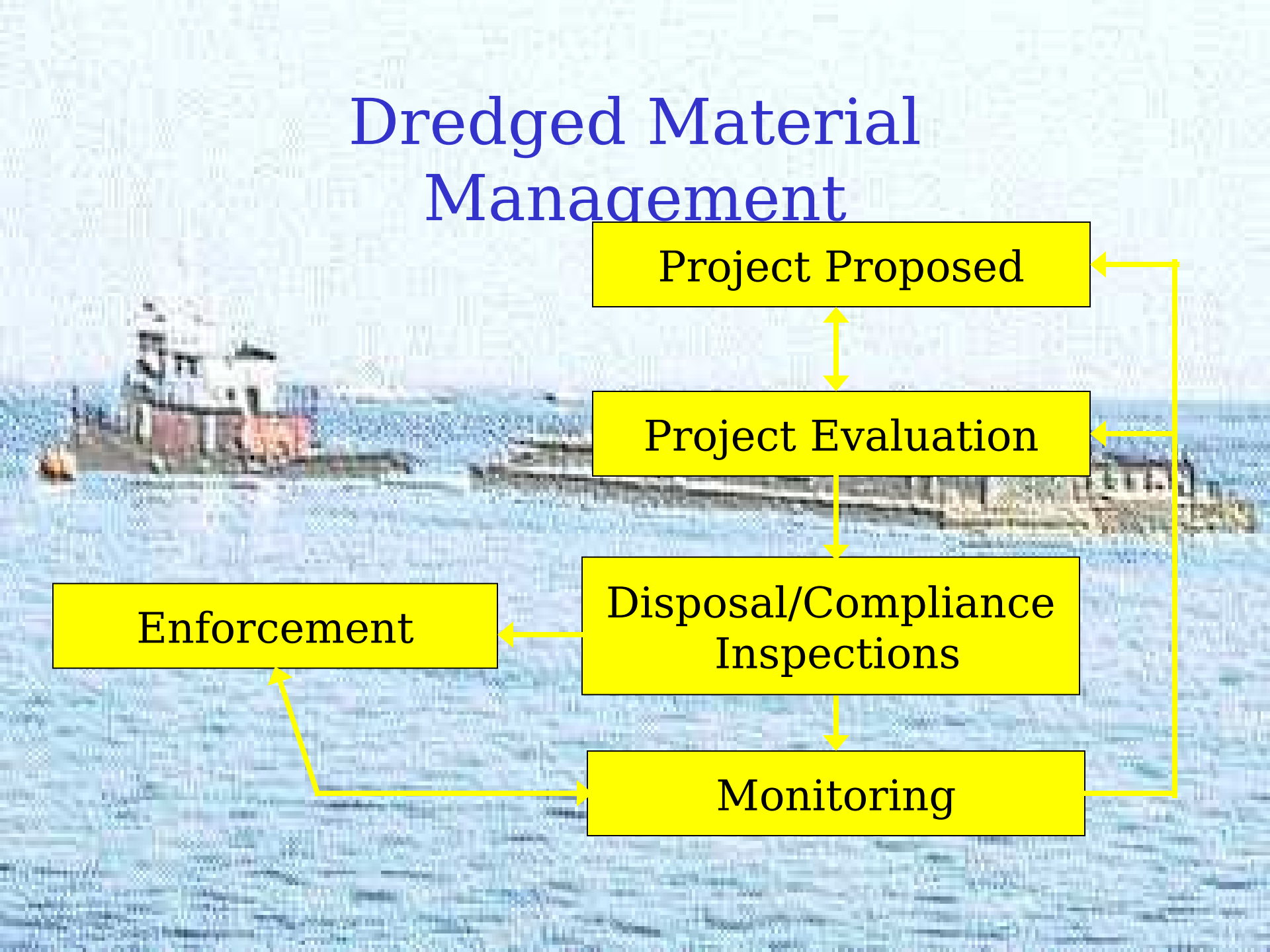
Disposal Area Monitoring System

DAMOS



Dredged Material Management



US Army Corps of Engineers®
New England District
Regulatory Division

New England Active Open Water Dredged Material Sites

Other Disposal Sites

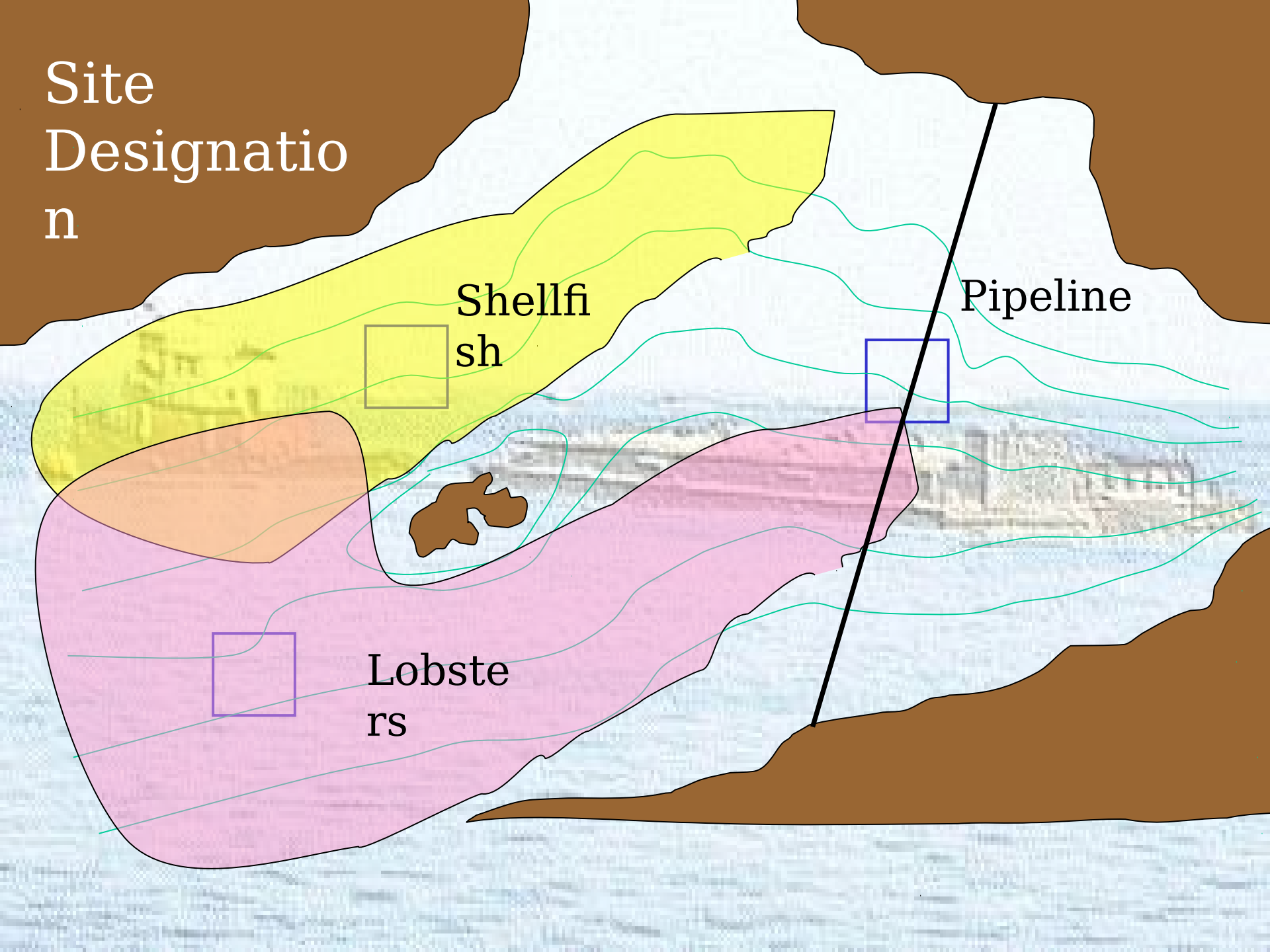
Tupper Ledge, Maine

Mark Island, Maine

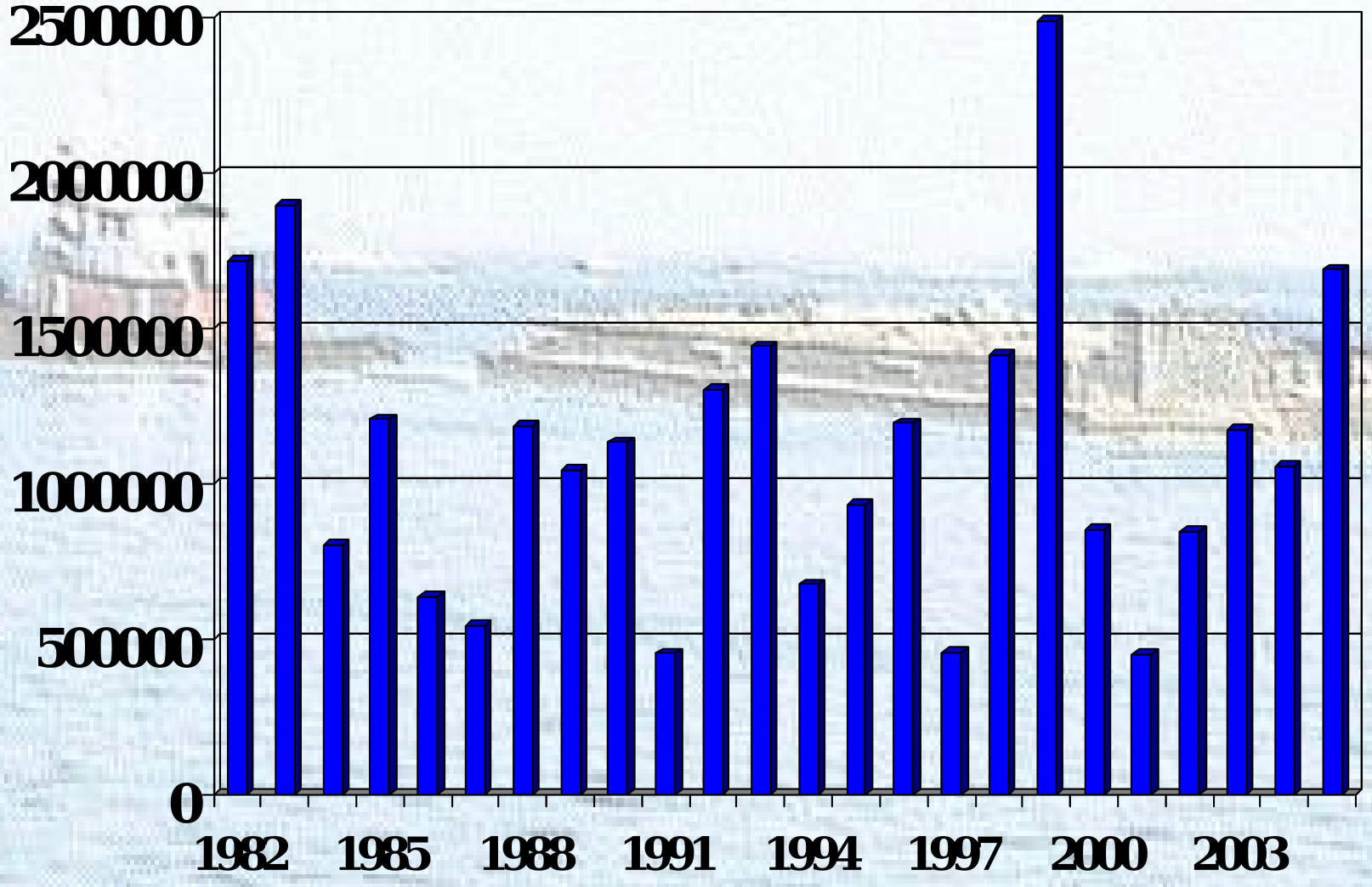
Gildersleeve Island, CT

Cape Cod Canal Site

Muscongus Bay, Maine

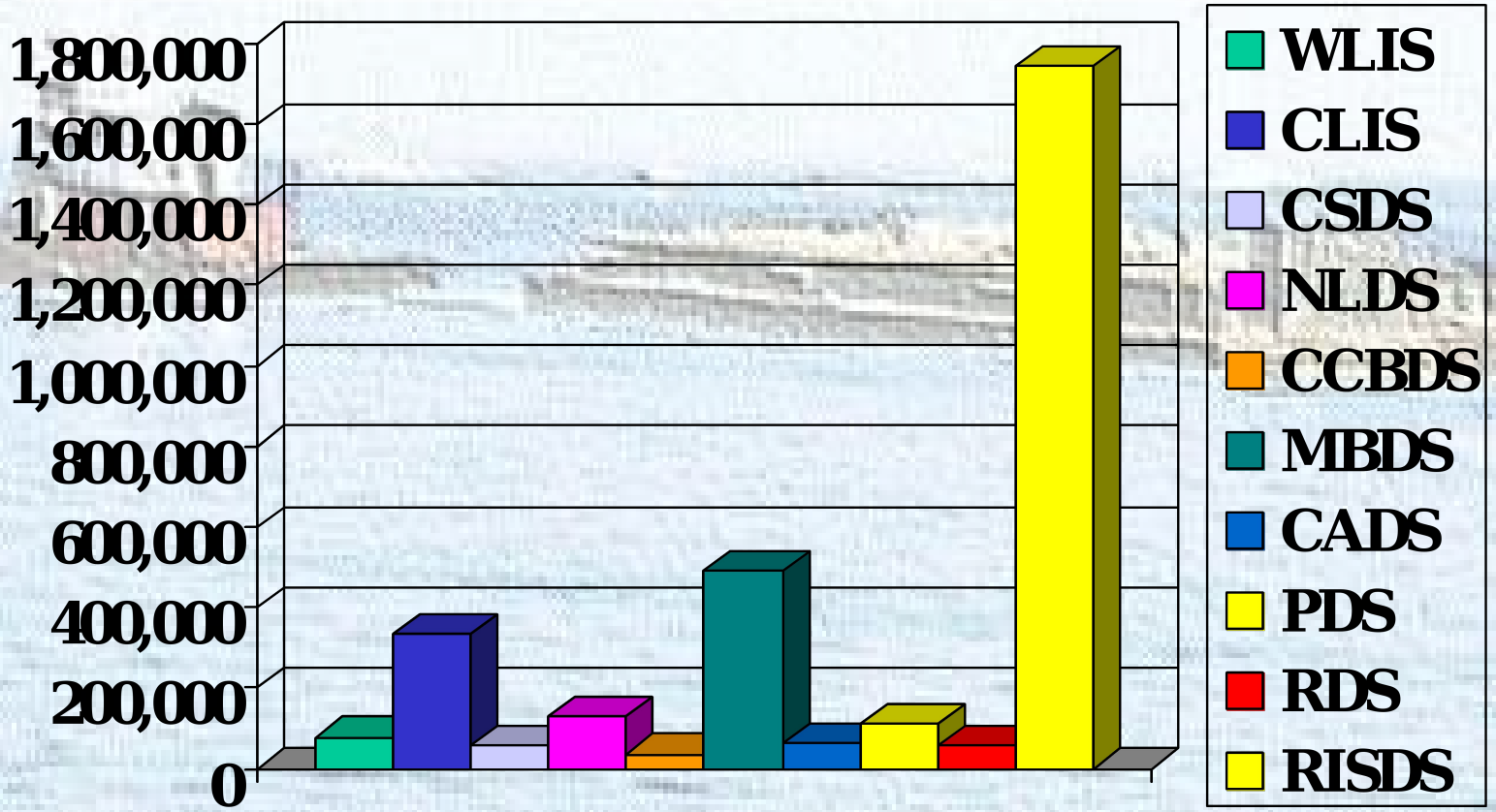

Site Designation
Shellfish
Pipeline
Lobsters

New England Open-water Site Use (cubic yards)



Average Annual Volume (cubic yards)

(1982-2005)



DAMOS OBJECTIVES
(1979)

- Monitor sites to ensure no unacceptable impacts
- Develop management techniques to minimize impacts
- Improve understanding of processes and mechanisms
- Develop understanding of organism/sediment relations
- Distribute results to improve public understanding of effects

Monitoring

DAMOS ACTIVITES

Monitoring

- Periodic Site Surveys
- Post-Storm Surveys

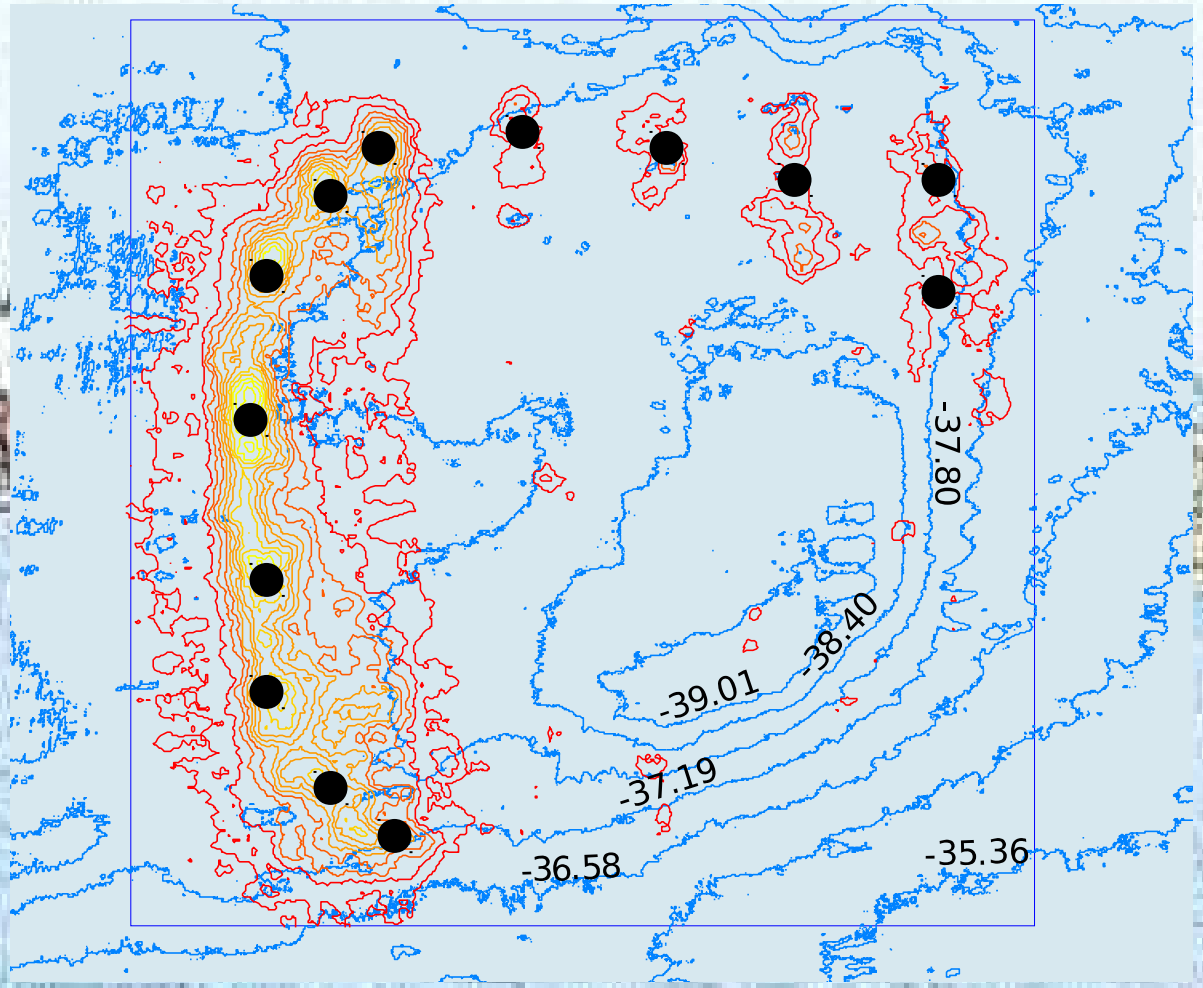
Management Technique Development

- Confinement Berms
- CAD Cells

Monitoring Technique Development

- Laser Line Scan
- Sub-bottom

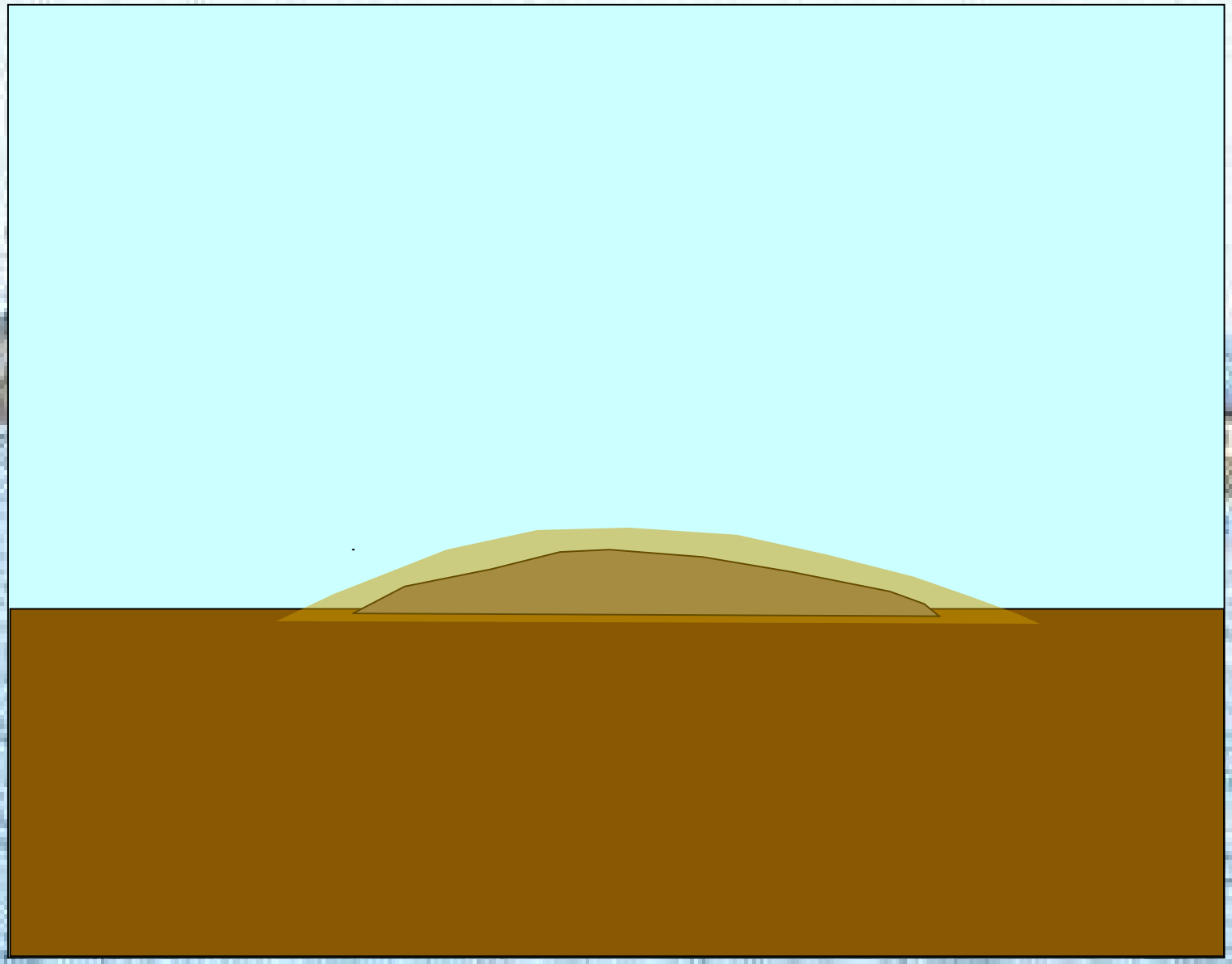
Bathymetric Changes at Rhode Island Sound Site



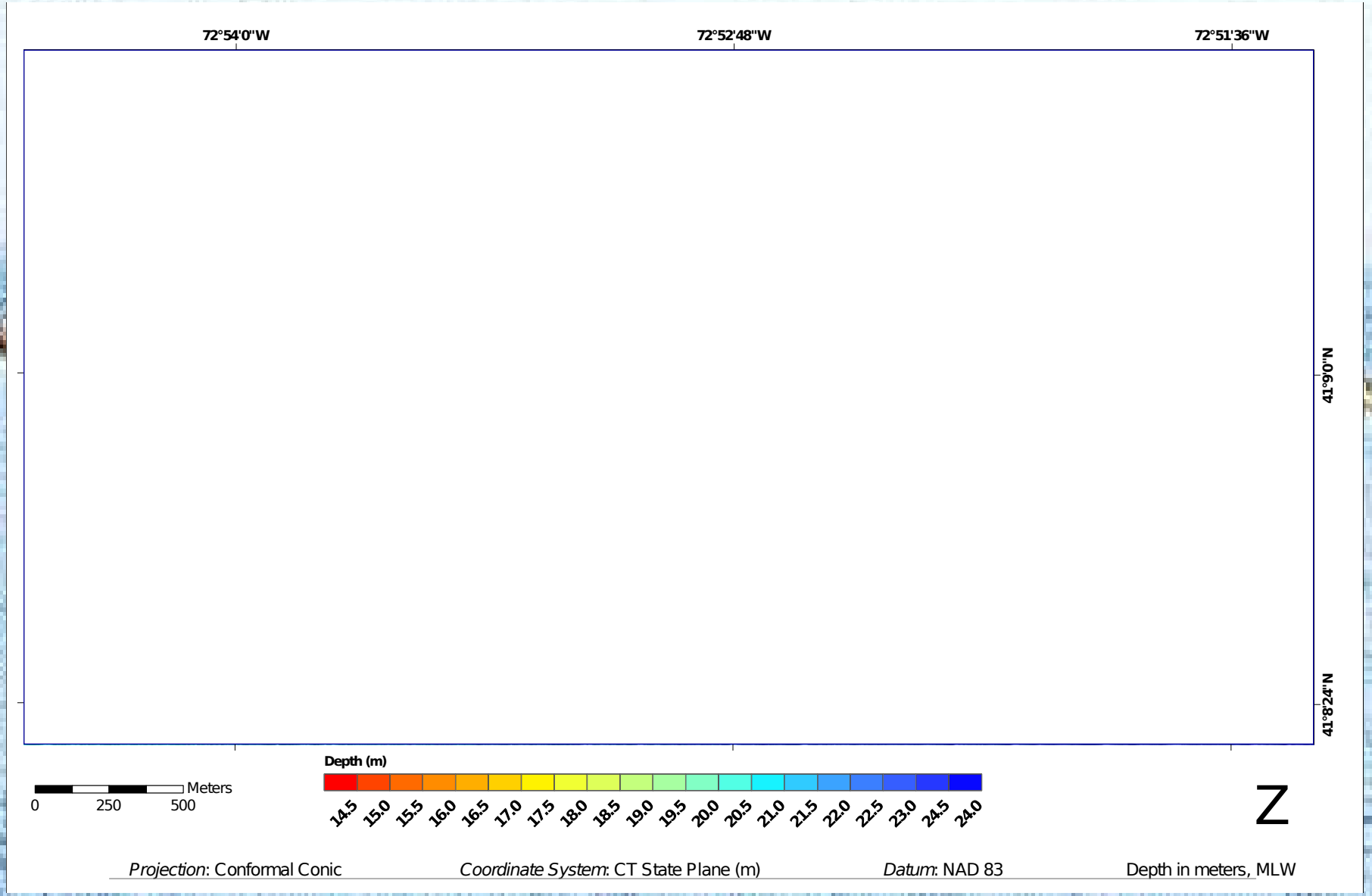
Site 1 nautical mile square

Depths in meters ● Targeted Disposal

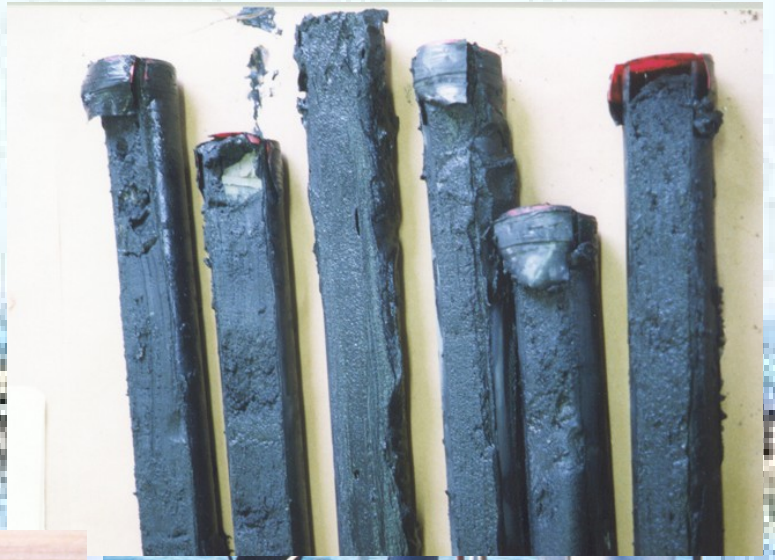
Level Bottom Capping



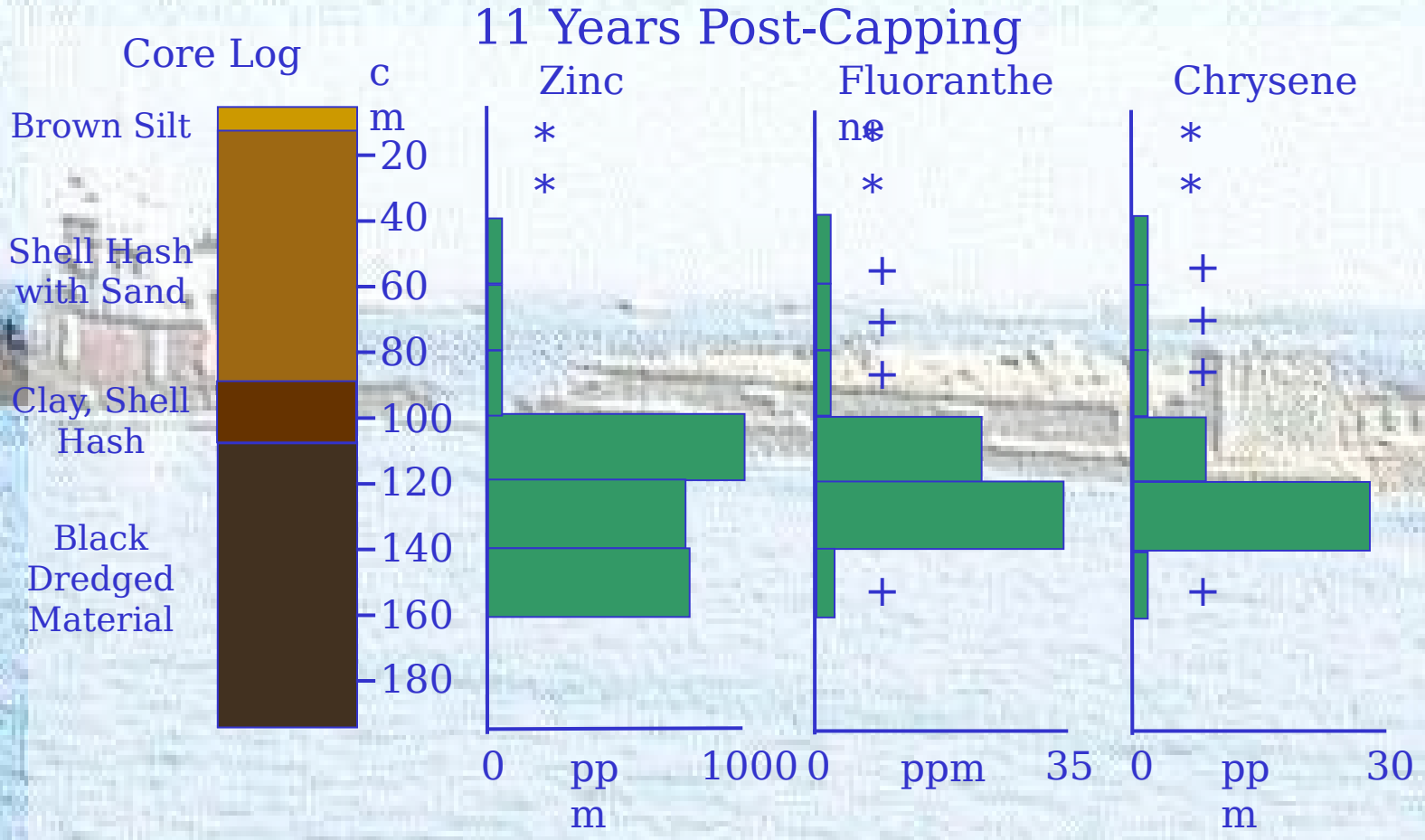
Central LIS Site



Coring

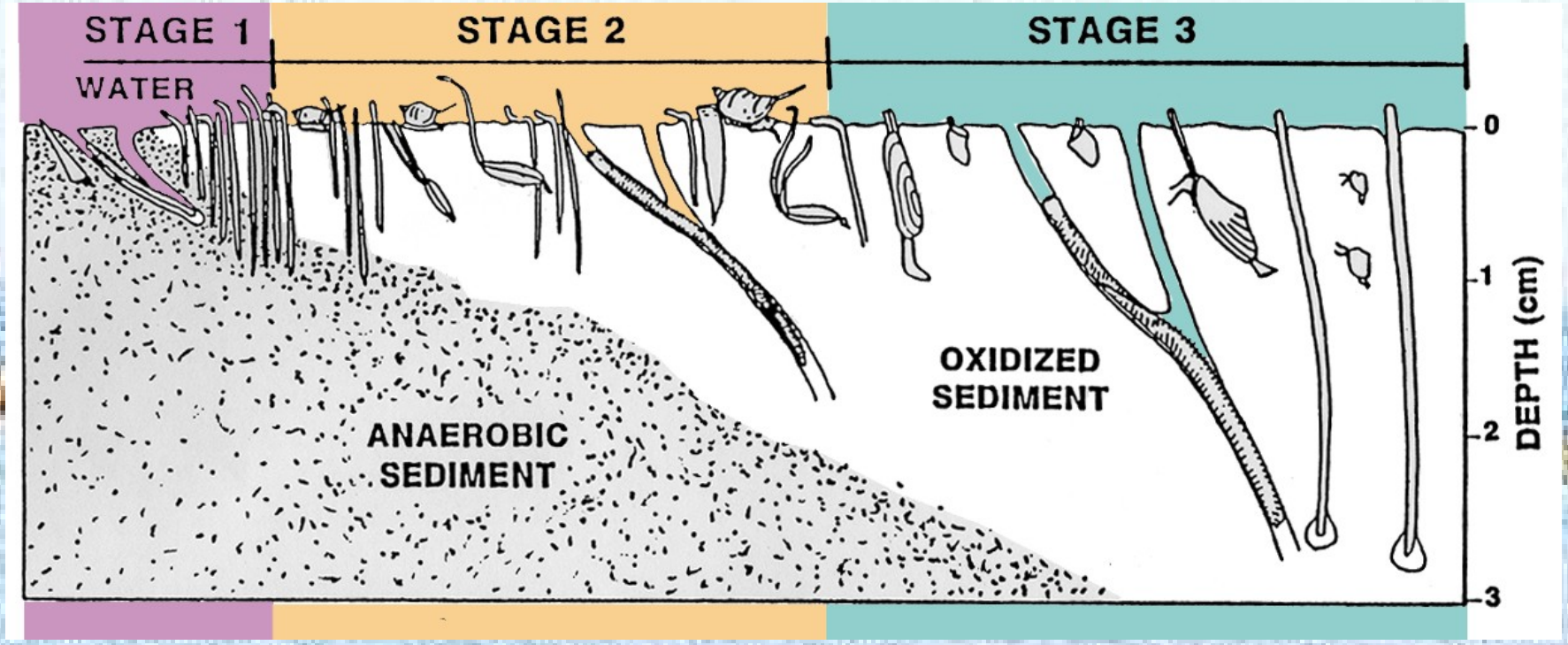


Capped Mound Core Contaminant Distribution



STNH-N Center 1990

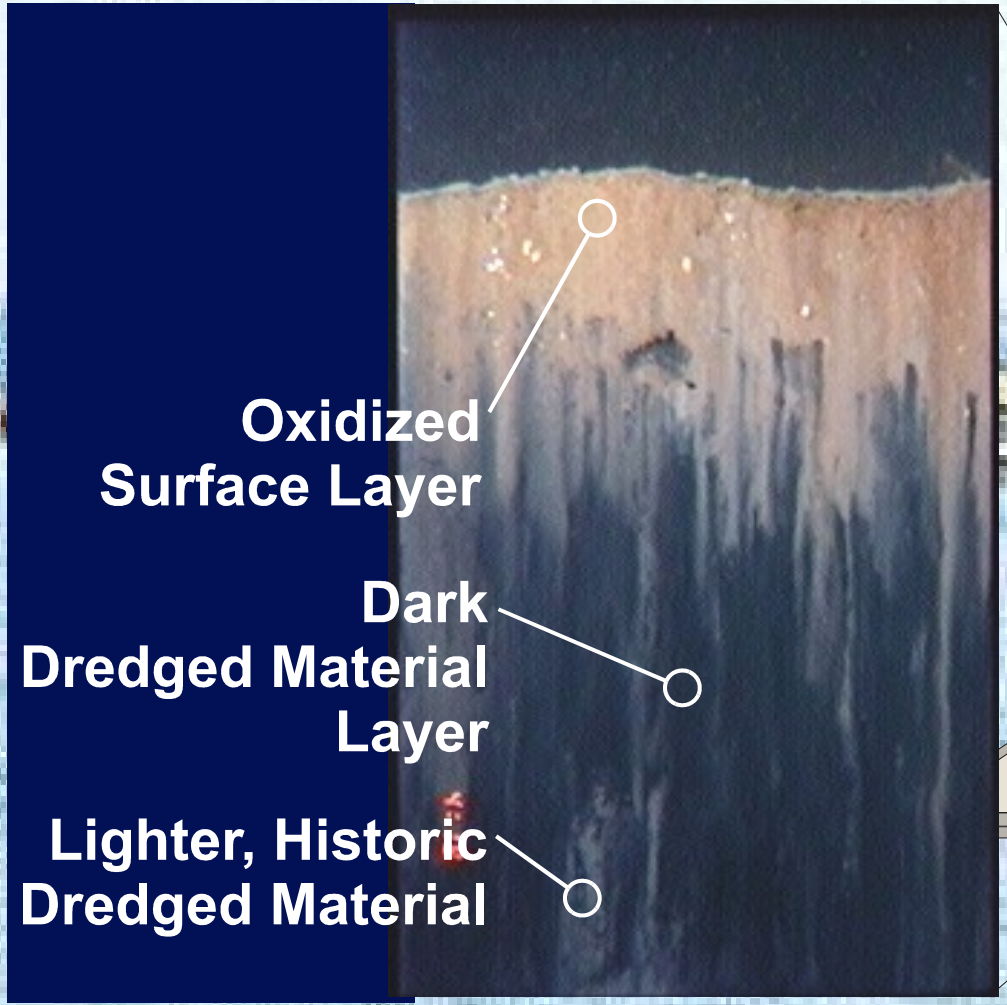
BENTHIC RECOLONIZATION

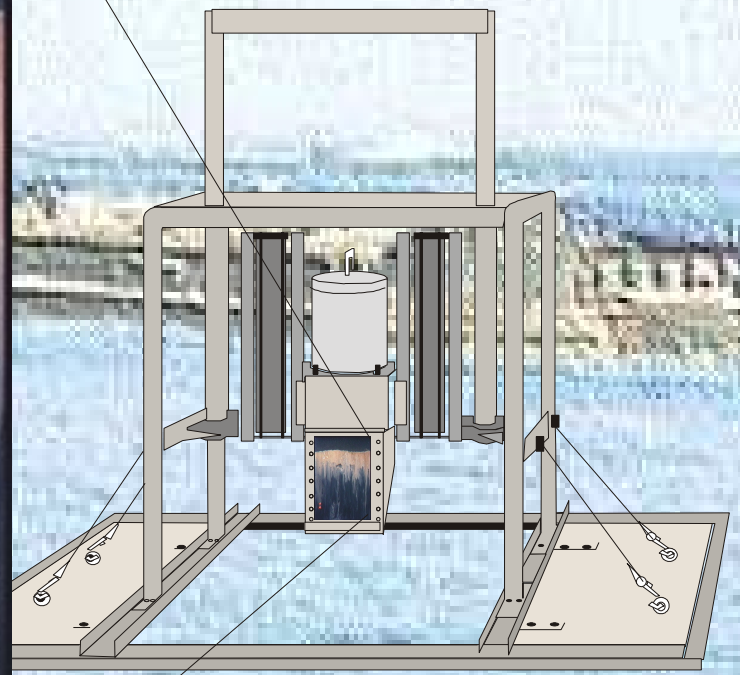


Time/Space: Immediate Post Disposal

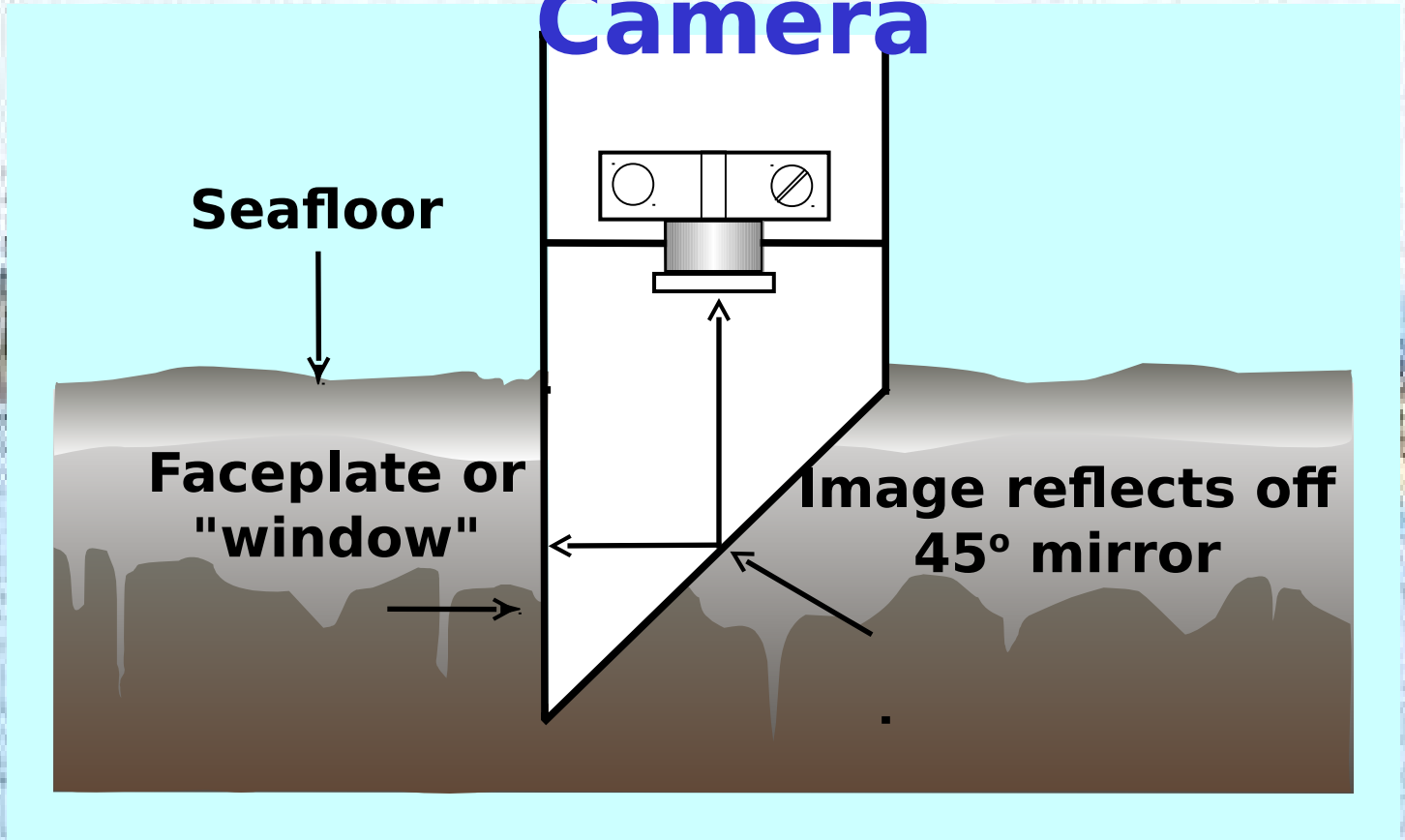
Ambient Bottom or Several Years Post Disposal

SEDIMENT-PROFILE CAMERA



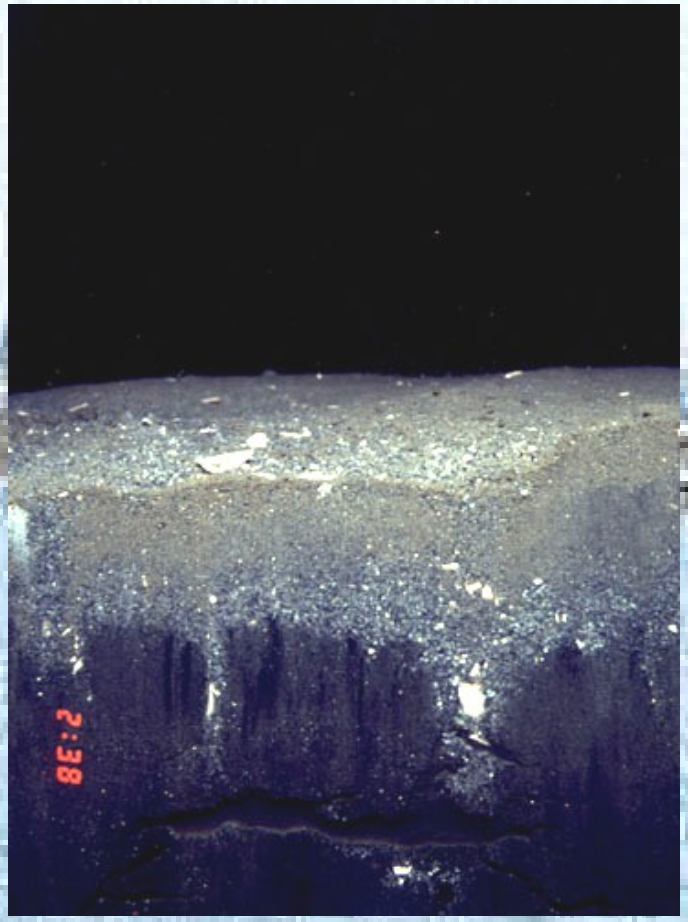


Schematic of Sediment Profile Camera



SEDIMENT PROFILE CAMERA OPERATIONS

Profile of Capped Sediment



Cap Layer of Queen's Gate Sediment

Cap Layer of A-III Sand

DAMOS RESULTS

Environmental Health of Sites

Site Stability

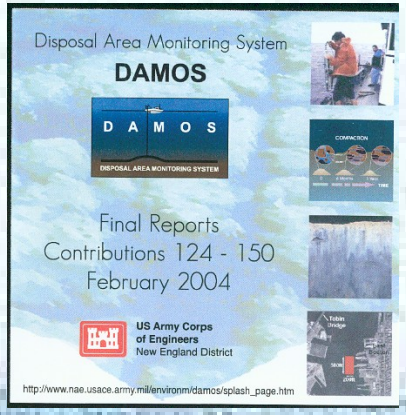
Chemical Isolation

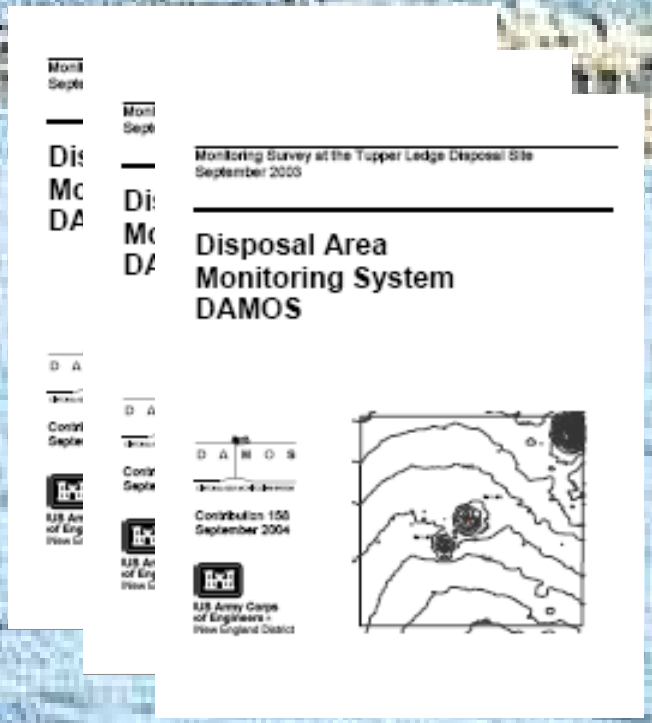
Sediment Evaluation Assessment

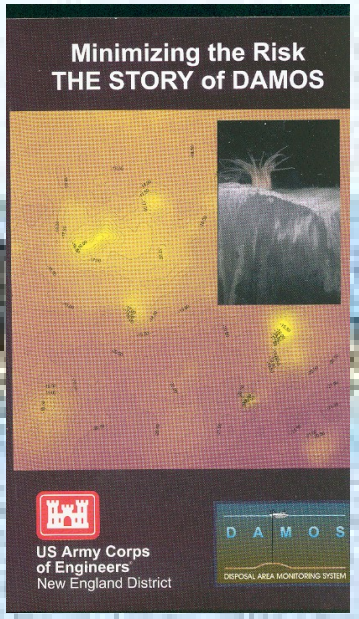
Management Technique Development

DAMOS Products

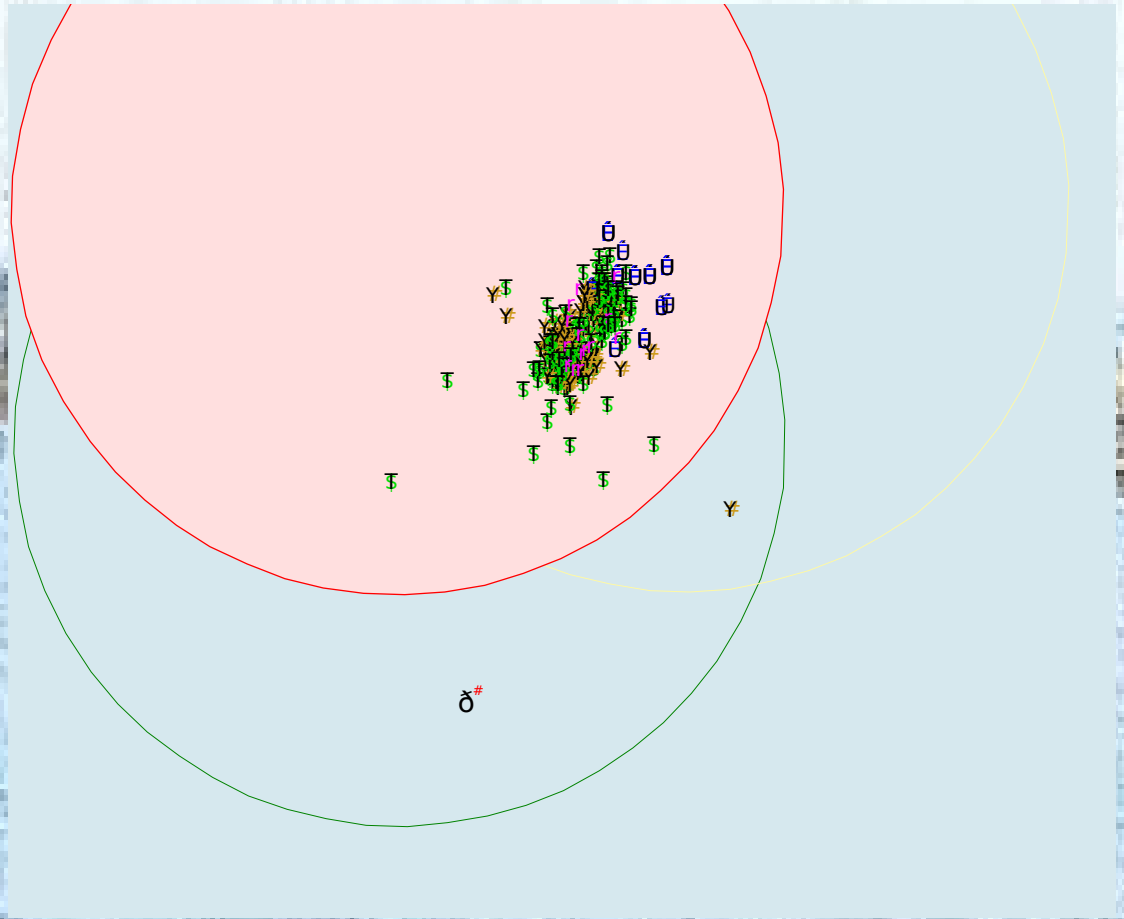
Army Corps of Engineers - Microsoft Internet Explorer
DAMOS Disposal Area MOnitoring System
US Army Corps of Engineers New England District
Home
Disposal Sites
Tech Reports
Papers
Video
Contact
DAMOS (Disposal Area MOnitoring System) is a program begun in 1977 by the New England District of the US Army Corps of Engineers to manage and monitor offshore dredged material disposal sites from Long Island Sound to Maine. DAMOS is a multi-disciplinary environmental monitoring program managed by the Marine Analysis Section of the Regulatory Division. Program information is shared with the scientific community and public through media such as technical reports, papers, and brochures.
Future program efforts respond to concerns expressed by interested members of the public, federal resource agencies (such as EPA Region I), and the environmental departments of New England coastal states.
Maps and Details about Disposal Sites (Updated March 30, 2006)
DAMOS Products
DAMOS Contributions (Updated March 30, 2006)
DAMOS Related Journals/Conference Papers
DAMOS Video Information
DAMOS CD's



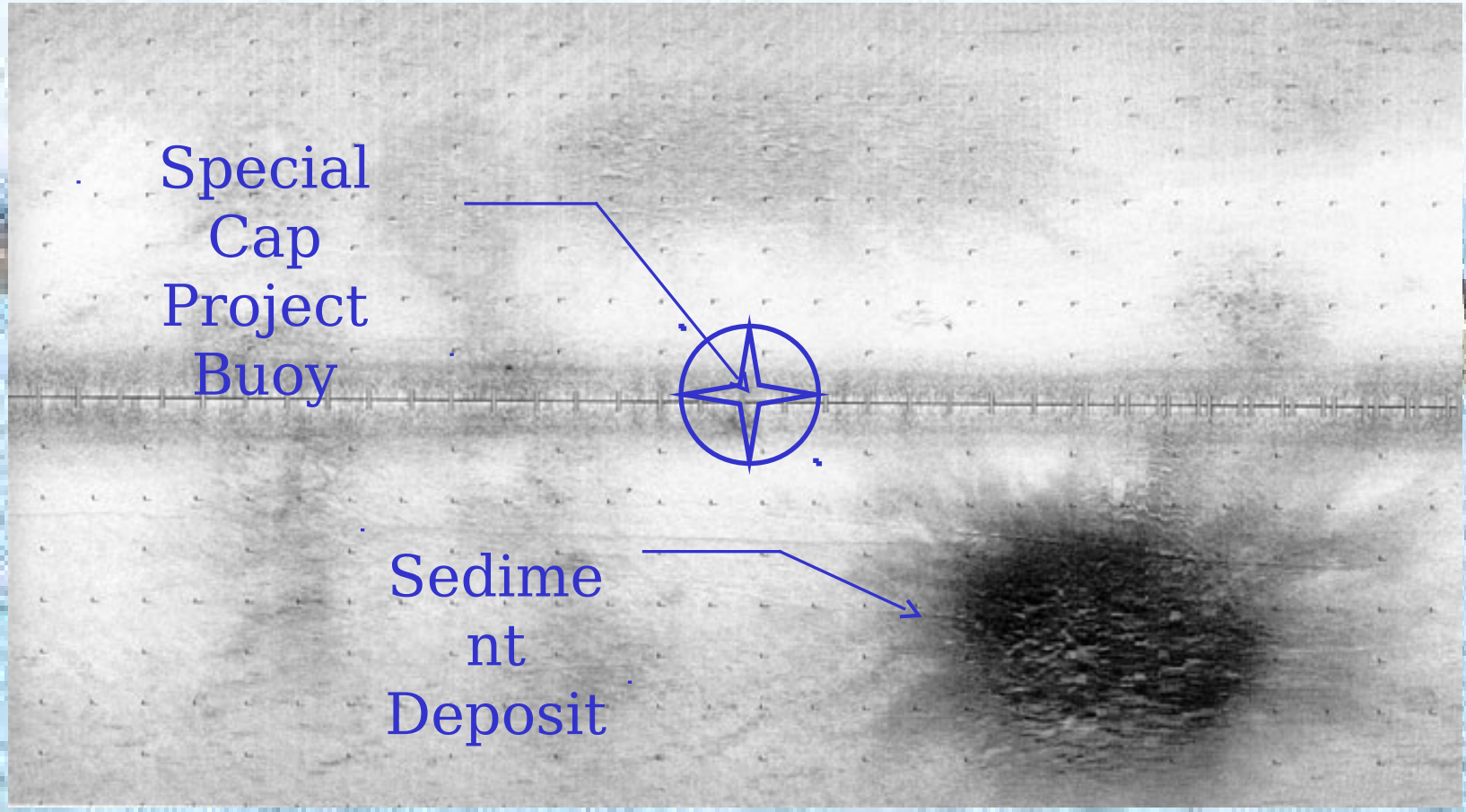



Minimizing the Risk
THE STORY of DAMOS
US Army Corps of Engineers
New England District
D A M O S
DISPOSAL AREA MONITORING SYSTEM

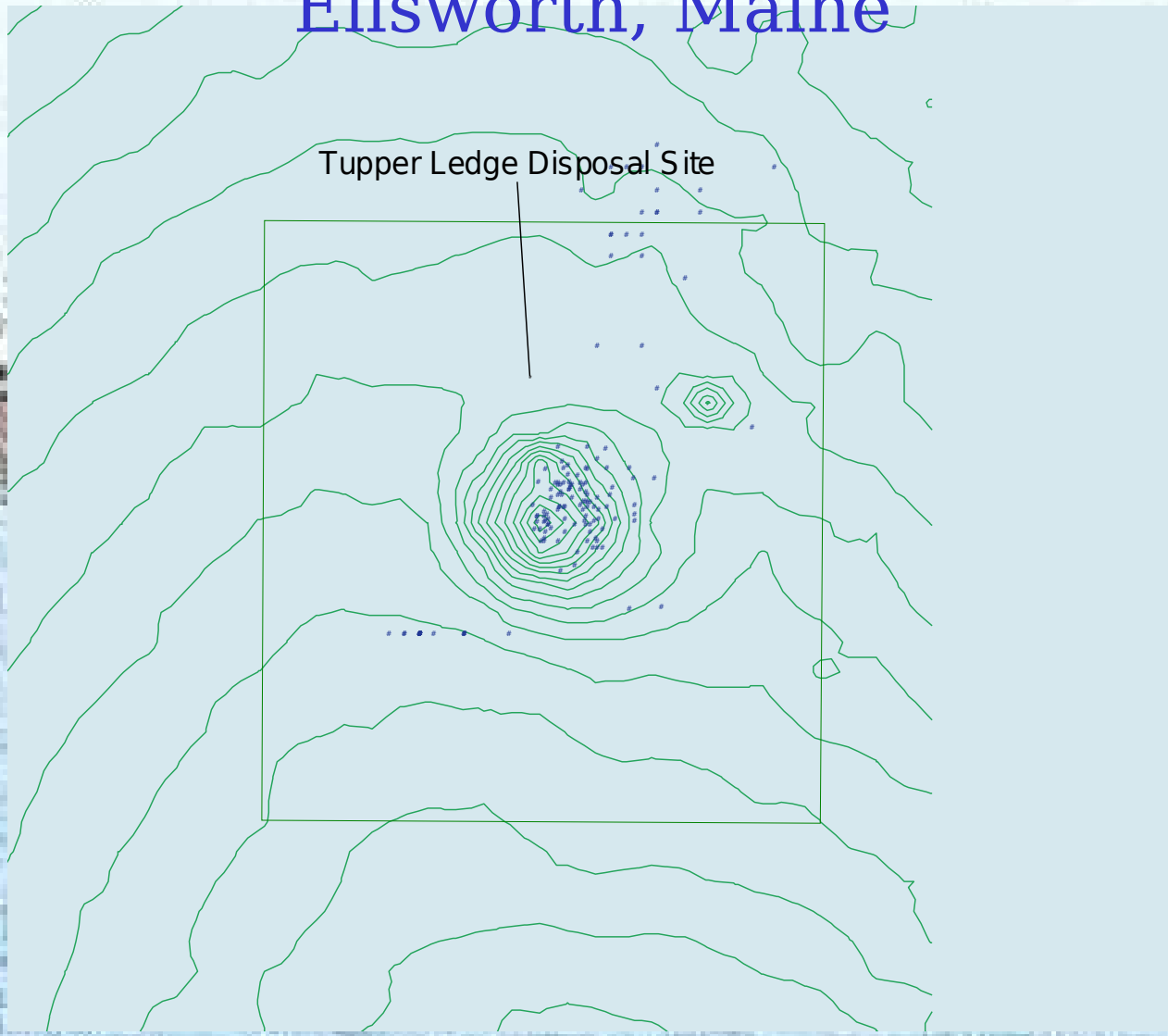
http://www.nae.usace.army.mil/damos/index.asp



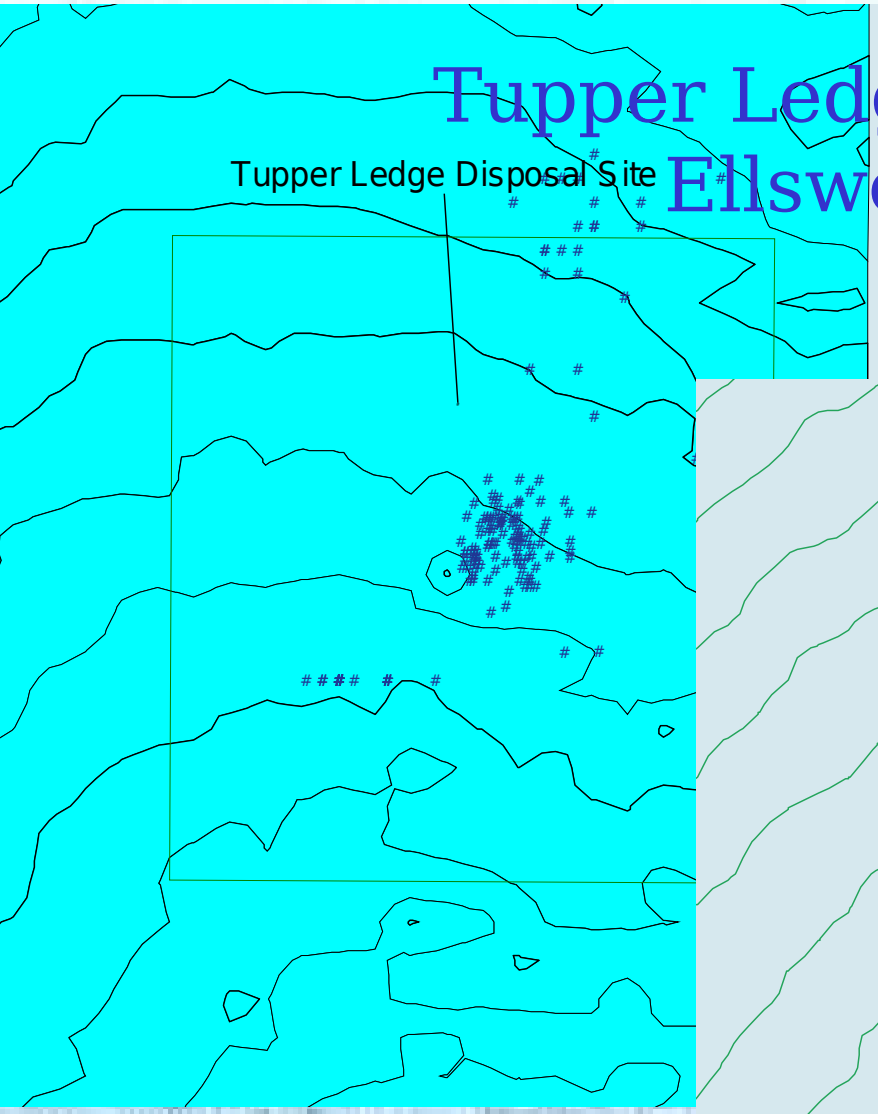
Side-scan Image of Unknown Disposal Event at MBDS

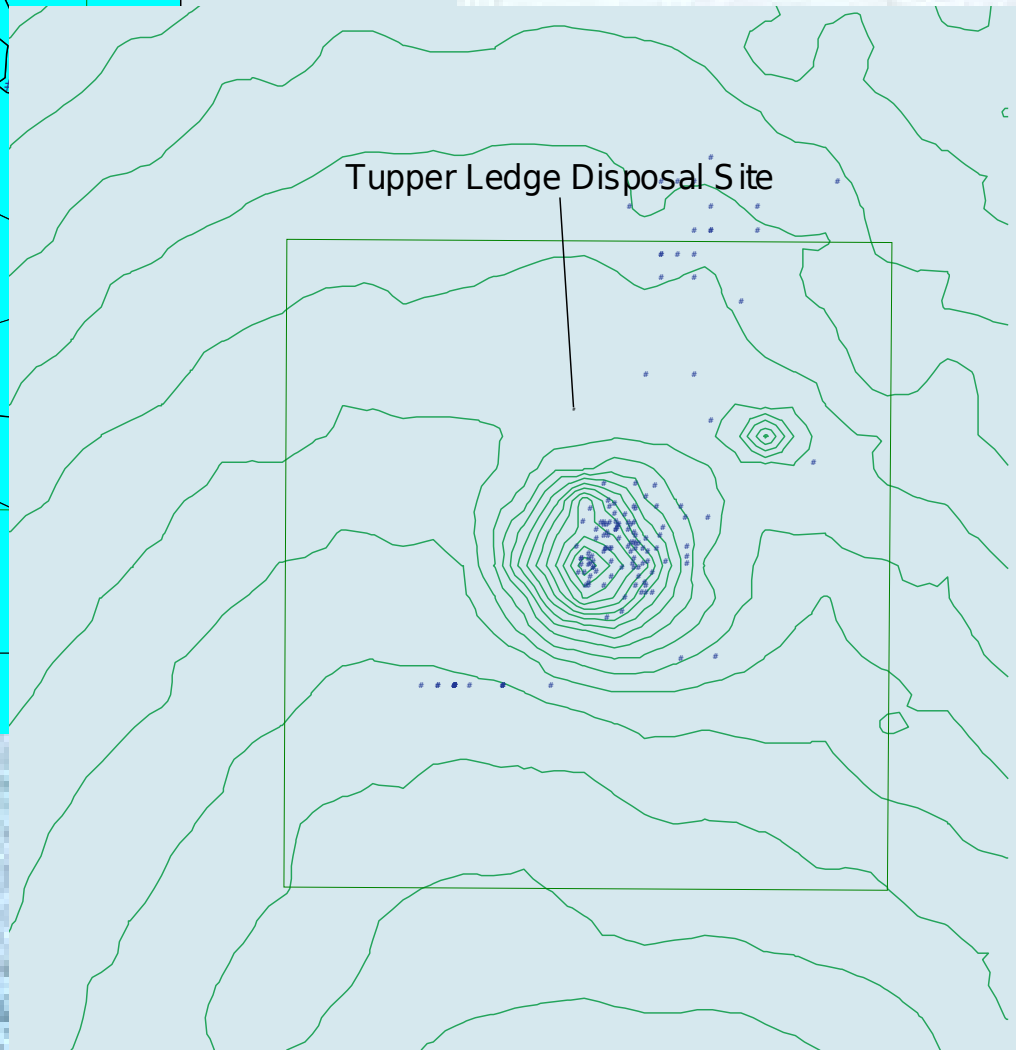


Tupper Ledge Disposal Site – Ellsworth, Maine

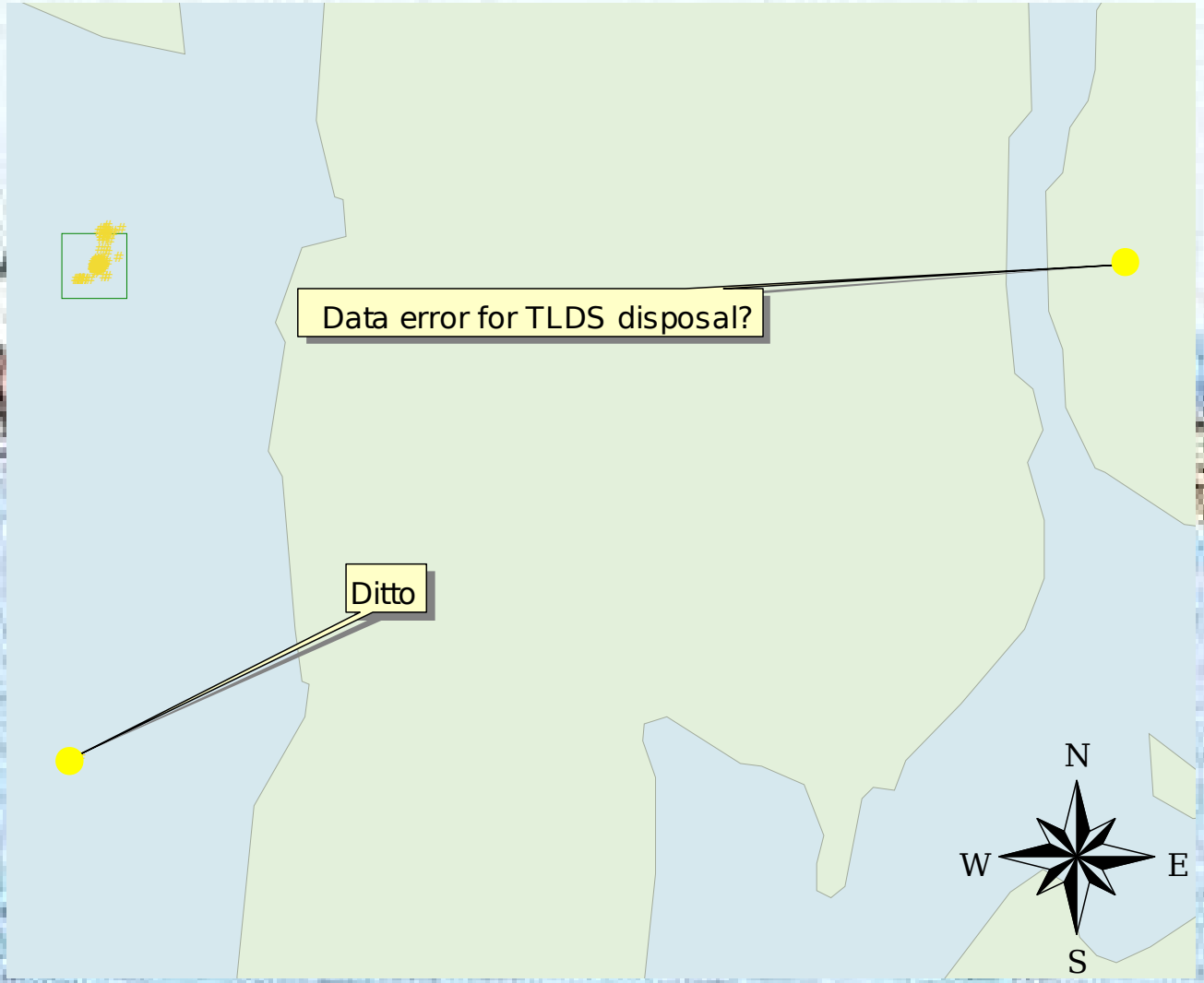


Tupper Ledge Disposal Site – Ellsworth, Maine





Disposal Placement Errors



Placement Error Sources

- Coordinate Translation
- Wrong Buoy
- Recording Errors
  - Using numbers from previous trip
  - Writing errors

Coordinate Translation

Example: 43° 17.50’ N Degrees, Decimal Minutes

70° 55.25’ W

Right 43° 17’ 30” N Degrees, Minutes, Seconds

70° 55’ 15” W

Wrong 43° 17’ 50” N

70° 55’ 25” W

Right 43.29166° N Decimal Degrees

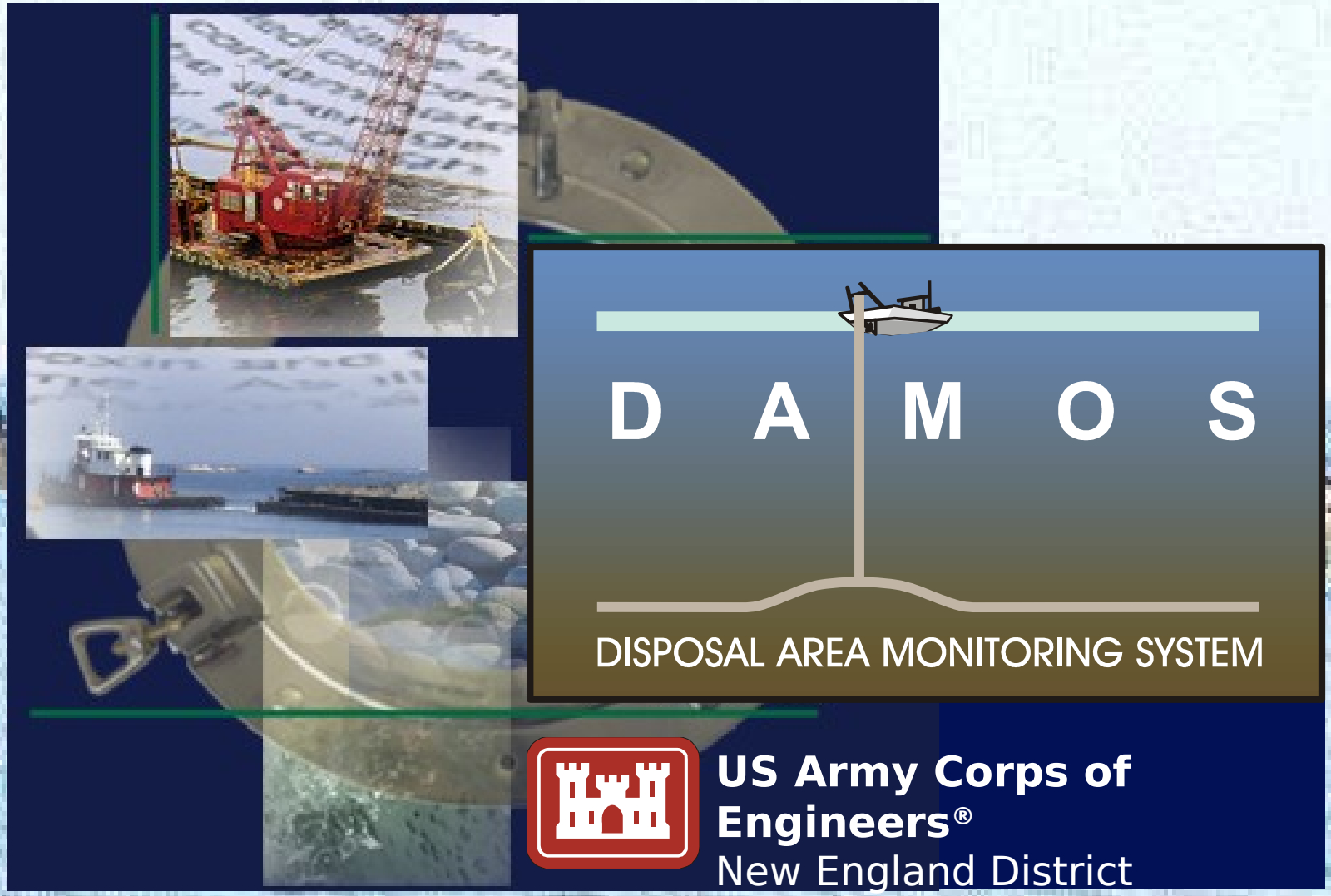
70.92083° W

Corps of Engineers Coordinate Conversion Program

Corpscon

Corpswin.exe

http://crunch.tec.army.mil/software/corpscon/corpscon.html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